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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,632	06/30/2000	Rajesh R. Shah	219.38572X00	9379

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EXAMINER

ANYA, CHARLES E

ART UNIT	PAPER NUMBER
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2126

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DATE MAILED: 04/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/608,632

Applicant(s)

SHAH, RAJESH R.

Examiner

Charles E Anya

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 7, 9 – 20, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. 5,819,107 to Lichtman et al. in view of U.S. Pat. No. 6,151,684 to Alexander et al.

As to claim 1, Lichtman teaches a Driver (Driver Loading Module 35 Col. 15 Ln. 35 – 53), a Host (Computer System 8 Col. 15 Ln. 1 – 67), a Verification Message (Arbitration Module 34 Col. 15 Ln. 38 – 53, Step 38 Col. Ln. 15 – 27), a Communication Channel (Resource 14 Col. 15 Ln. 1 – 53) and loading the driver (Driver Loading Module 35 Col. 15 Ln. 35 – 53).

Alexander teaches Host (Node 12 Col. 5 Ln. 54 – 67), a Fabric (Cluster 10 Col. 5 Ln. 54 – 67), an I/O Enclosure (SCSI Controller 22, I/O Controllers 28 Col. 5 Ln. 54 – 67) and assigning the I/O Controller to the host (DOIS Col. 4 Ln. 25 – 43, Col. 10 Ln. 1 – 27). It would have been obvious to apply the teaching of Alexander to the system of Lichtman. One would have motivated to make such modifications to provide a fault tolerant SAN system (Col. 10 Ln. 1 – 7).

As to claim 2, Lichtman teaches a channel adapter initialization in the host (Computer Control System 21 Col. 14 Ln. 9 – 43).

As to claim 3, Alexander teaches a Forwarding Table (Information Table 40 Col. 12 Ln. 32 – 61: NTOE: The determining aspect of the initialization is inherent more especially when a new node, controller or I/O device is added to the cluster). It would have been obvious to apply the teaching of Alexander to the system of Lichtman. One would have motivated to make such modifications to provide access to I/O device.

As to claim 4, Lichtman teaches a channel adapter initialization in I/O enclosure (Computer Control System 21 Col. 14 Ln. 9 – 43).

As to claim 5, see the rejection of claims 2 and 3.

As to claim 6, claim 1 meets claim 6 except for a list of drivers and modifying the list of drivers

Lichtman teaches a list of drivers (“device drivers...” Col. 15 Ln. 41 – 53). Although the step of modifying the list of drivers is not explicitly taught, Lichtman inherently teaches this limitation because the identified device drivers (Col. 15 Ln. 41 – 53) may be newly added device drivers.

As to claim 7, an interrupt is inherent because a notice must be sent to indicate a change in the list of driver especially if new device information is received.

As to claim 9, Lichtman as modified teaches determining the list of driver scanning the fabric for I/O controllers (Col. 22 Ln. 9 – 27).

As to claim 10, Lichtman teaches obtaining the list of drivers from a storage (Col. 22 Ln. 9 – 27).

As to claim 11, Lichtman teaches a Subnet Manager (Configuration Logic 30 Col. 15 Ln. 10 – 40) and also see claim 21.

As to claim 12, Lichtman as modified teaches the step of notifying a control when local channel adapter ports are configured and ready for fabric connectivity (Configuration Logic 30 Col. 15 Ln. 10 – 53).

As to claims 13 – 19, see the rejection of claims 6 – 12.

As to claim 20, see the rejection of claim 1.

As to claim 24, see the rejection of claims 1 and 2.

As to claim 25, see the rejection of claim 1.

3. Claims 8, 21 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,819,107 to Lichtman et al. in view of U.S. Pat. No. 6,151,684 to Alexander et al. as applied to claim 21 above, and further in view of U.S. Pat. No. 6,499,073 B1 to Wallach et al.

As to claim 8, Wallach teaches step of determining the list of drivers by sending a message to a subnet manager (Col. 16 Ln. 31 – 47). It would have been obvious to apply the teaching of Wallach. One would have been motivated to make such modification in order determine the order of in which each adapter get initialized (Col. 16 Ln. 35 – 37).

As to claim 21, claims 1, 3 and 11 meets claim 21 except for a remote channel adapter.

Wallach teaches a Remote Channel Adapter (Col. 8 Ln. 36 – 45) and subnet manager for initializing remote channel adapter (Driver 308 Col. 18 Ln. 7 – 42). It would have been obvious to apply the teaching of Wallach. One would have been motivated to make such modifications in order to locate a new adapter (Col. 7 Ln. 7 – 19).

As to claim 22, claim 12 meets claim 22 except for a channel adapter driver and one or more ports on the channel adapter.

Lichtman teaches a Channel Adapter Driver (Col. 15 Ln. 23 – 53, Col. 16 Ln. 15 – 41), and one or more ports on the channel adapter (I/O ports 28 Col. 12 Ln. 31 – 34).

As to claim 23, Lichtman teaches step of attempting to use the local channel adapter to communicate with after local channel adapter initialization and ready for fabric connectivity (Col. 20 Ln. 43 – 59).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E Anya whose telephone number is (703) 305-3411. The examiner can normally be reached on M-F (8:30-5:30) First Friday off.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Charles E Anya
Examiner
Art Unit 2126

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